

Title (en)
RARE EARTH FLUOROSULPHIDES OR OXYFLUOROSULPHIDES, METHODS FOR PREPARING SAME AND USE THEREOF AS DYEING PIGMENT

Title (de)
FLUOROSULFIDE ODER OXYFLUOROSULFIDE DER SELTENEN ERDEN, VERFAHREN ZU DEREN HERSTELLUNG UND IHRE VERWENDUNG ALS FARBPIGMENTE

Title (fr)
FLUOROSULFURES OU OXYFLUOROSULFURES DE TERRES RARES, LEURS PROCEDES DE PREPARATION ET LEUR UTILISATION COMME PIGMENT COLORANT

Publication
EP 1194377 A1 20020410 (FR)

Application
EP 00936994 A 20000531

Priority
• FR 0001508 W 20000531
• FR 9906874 A 19990601

Abstract (en)
[origin: WO0073210A1] The invention concerns novel rare earth fluorosulphides using four modes of production, novel rare earth oxyfluorosulphides, their preparation methods and their use as dyeing pigment. The fluorosulphide of the first mode corresponds to the formula (LnSF) (Ln represents a rare earth) and has a particle average size of more than 5 μ m. That of the second mode is a mixed rare earth fluorosulphide of formula (Ln, Ln')SF and in the form of a solid solution. The fluorosulphide of the third mode, in a first embodiment, comprises at least an alkaline element and has a LnSF-type structure, the rare earth being selected among yttrium and from the group ranging from lanthanum to erbium inclusively. In a second embodiment of said third mode, the fluorosulphide comprises at least an alkaline element, it has a space group hexagonal structure $P6_3/22$, the rare earth likewise belonging to the group ranging from holmium to lutetium inclusively, also including yttrium. The fluorosulphide of the fourth mode corresponds to the formula $Ln_{>2}AF_{>4}S_{>2}$ wherein A is an alkaline-earth. The oxyfluorosulphide corresponds to the formula $Ln_{>3}S_{>2}F_{>3}O$ wherein Ln represents at least a trivalent rare earth.

IPC 1-7
C01F 17/00; **C08K 3/30**; **C09D 7/12**

IPC 8 full level
C01F 17/00 (2006.01); **C09D 11/00** (2006.01); **C09D 201/00** (2006.01)

CPC (source: EP)
C01F 17/30 (2020.01); **C01P 2002/76** (2013.01); **C01P 2002/77** (2013.01); **C01P 2004/61** (2013.01); **C01P 2006/60** (2013.01)

Citation (search report)
See references of WO 0073210A1

Cited by
CN102604636A; US8551793B2

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
FR 2794450 A1 20001208; **FR 2794450 B1 20020816**; CA 2376308 A1 20001207; EP 1194377 A1 20020410; JP 2003500328 A 20030107; WO 0073210 A1 20001207

DOCDB simple family (application)
FR 9906874 A 19990601; CA 2376308 A 20000531; EP 00936994 A 20000531; FR 0001508 W 20000531; JP 2000621285 A 20000531